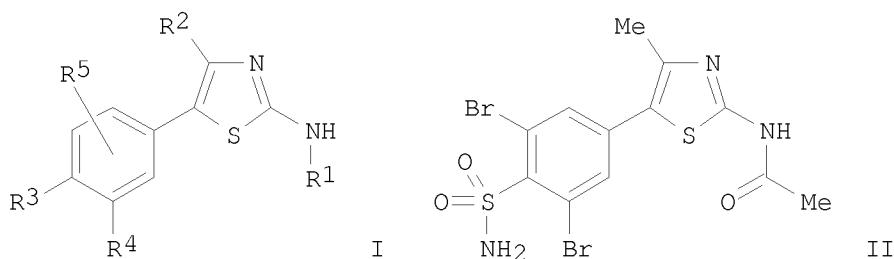


L7 ANSWER 7 OF 7 ZCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:696878 ZCPLUS <<LOGINID::20090619>>
 DOCUMENT NUMBER: 139:230770
 TITLE: 5-Phenylthiazole derivatives and their use as
 phosphatidylinositol 3-kinase (Pi3K) inhibitors for
 the treatment of allergic and inflammatory diseases
 INVENTOR(S): Bruce, Ian; Finan, Peter; Leblanc, Catherine;
 McCarthy, Clive; Whitehead, Lewis; Blair, Nicola
 Elaine; Bloomfield, Graham Charles; Hayler, Judy;
 Kirman, Louise; Oza, Mrinalini Sachin; Shukla, Lena
 PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
 SOURCE: PCT Int. Appl., 101 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072557	A1	20030904	WO 2003-EP2036	20030227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
CA 2477601	A1	20030904	CA 2003-2477601	20030227
AU 2003214080	A1	20030909	AU 2003-214080	20030227
EP 1480962	A1	20041201	EP 2003-709730	20030227
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BR 2003008030	A	20041228	BR 2003-8030	20030227
CN 1639139	A	20050713	CN 2003-804796	20030227
JP 2005522458	T	20050728	JP 2003-571263	20030227
NZ 534657	A	20070531	NZ 2003-534657	20030227
IN 2004CN01872	A	20060623	IN 2004-CN1872	20040823
MX 2004008362	A	20041126	MX 2004-8362	20040827
NO 2004004095	A	20041102	NO 2004-4095	20040927
US 20050119320	A1	20050602	US 2005-504259	20050131
ZA 2004006292	A	20060531	ZA 2004-6292	20060320
AU 2007203160	A1	20070726	AU 2007-203160	20070706
PRIORITY APPLN. INFO.:			GB 2002-4765	A 20020228
			GB 2002-29626	A 20021219
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			WO 2003-EP2036	W 20030227

OTHER SOURCE(S): MARPAT 139:230770
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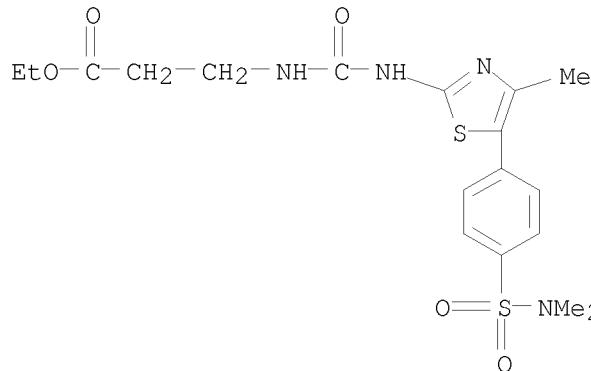
AB Title compds. I, in free or salt form, are disclosed [wherein: R1 = H, aminocarbonyl optionally substituted by nitrile, or alkylcarbonyl, alkylaminocarbonyl, heterocyclaminocarbonyl, heterocyclcarbonyl, benzoyl, phenylaminocarbonyl, cycloalkanoyl, or cycloalkylaminocarbonyl, all of which are optionally substituted by a wide variety of groups; R2 = C1-3 alkyl or halogen; one of R3 and R4 = R6 and the other = R7; R5 = H or halo; R6 = H, OH, amino, -SOR8, -SO2R8, -SO2NH2, -SO2NR9R10, -COR8, -CONHR8, -NHSO2R8, nitrile, carboxy, -OR8 or haloalkyl; R7 = H, R11, -OR11, halo, carboxy, -SO2R8, cyano, or haloalkyl, or, when R4 = R7, R7 can also = -NR12R13, R14, or -OR14; R8, R11 = (un)substituted alkyl or cycloalkyl; either R9 = alkyl or cycloalkyl, optionally substituted by OH, alkoxy, nitrile, amino, alkylamino, dialkylamino, or a 5- or 6-membered N/O/S-heterocyclyl optionally substituted by alkyl; and R10 = H or alkyl; or NR9R10 = 5- or 6-membered N/O/S-heterocyclyl optionally substituted by alkyl; either R12 = alkyl or cycloalkyl optionally substituted by hydroxy, amino, alkylamino or dialkylamino; and R13 = H or alkyl; or NR12R13 = 5- or 6-membered N/O/S-heterocyclyl optionally substituted by alkyl; R14 = alkyl optionally substituted by hydroxy or -NR12R13]. I are useful for treating diseases mediated by phosphatidylinositol 3-kinase (Pi3K), particularly the gamma isoform (p110 γ). Pharmaceutical compns. that contain the compds. and processes for preparing the compds. are also described. Approx. 180 specific examples are described and claimed. For instance, N-[4-methyl-5-(4-nitrophenyl)thiazol-2-yl]acetamide underwent a sequence of: (1) hydrogenation of nitro to amino over Pd/C; (2) 3,5-dibromination of the 4-aminophenyl ring using Br₂ in 1,4-dioxane; (3) diazotization of the amine; (4) chlorosulfonylation of the diazonium salt with SO₂ and CuCl₂ in aqueous HCl/AcOH; and (5) ammonolysis of the resultant sulfonyl chloride with NH₃ and Na₂CO₃ in dioxane, to give invention compound II. In an in vitro assay against human recombinant Pi3K γ expressed by Sf9 insect cells, I had IC₅₀ values below 0.6 μ M in an in vitro assay. Several example compds. had IC₅₀ values in the range of 0.002-0.040 μ M, including II (0.009 μ M).

IT **593958-80-6P**, 3-[3-[5-(4-Dimethylsulfamoylphenyl)-4-methylthiazol-2-yl]ureido]propionic acid ethyl ester **593959-15-0P**, [3-[5-[4-(Methanesulfonyl)phenyl]-4-methylthiazol-2-yl]ureido]acetic acid ethyl ester **593960-33-9P**, 1-[2-(5-Ethyloxazol-2-yl)ethyl]-3-[5-[3-fluoro-4-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]urea
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of phenylthiazole derivs. as phosphatidylinositol 3-kinase inhibitors)

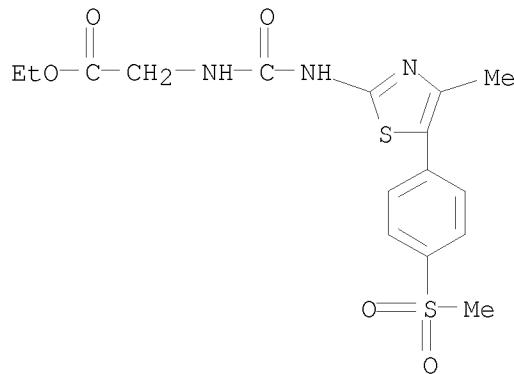
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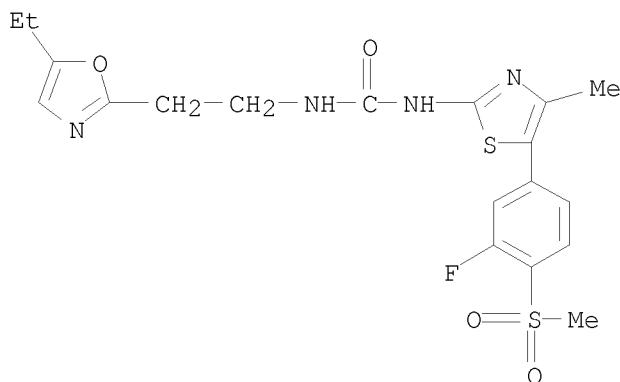
RN 593959-15-0 ZCPLUS

CN Glycine, N-[[[4-methyl-5-[4-(methylsulfonyl)phenyl]-2-thiazolyl]amino]carbonyl]-, ethyl ester (CA INDEX NAME)



RN 593960-33-9 ZCPLUS

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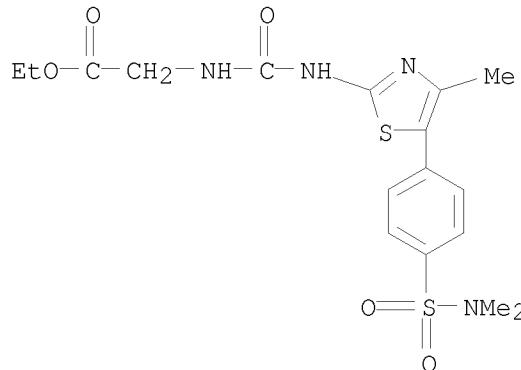


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 1-[5-[3-Fluoro-4-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]-3-(2-hydroxyethyl)urea **593959-44-5P**,
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 1-[5-[4-Chloro-3-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]-3-[(imidazol-1-yl)propyl]urea **593959-68-3P**,
 Pyrrolidine-1-carboxylic acid [5-[4-chloro-3-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]amide **593959-70-7P**,
 1-[5-[4-Chloro-3-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]-3-[2-(1-methylpyrrolidin-2-yl)ethyl]urea **593959-71-8P**,
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 1-[5-[4-Chloro-3-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]-3-(2-hydroxyethyl)urea **593959-73-0P**,
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 [5-[4-chloro-3-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]amide
593959-97-8P, 1-[5-[4-Chloro-3-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]-3-(4-hydroxybutyl)urea **593959-98-9P**,
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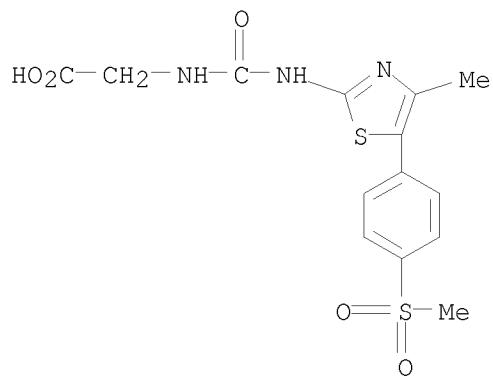
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 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of phenylthiazole derivs. as phosphatidylinositol 3-kinase inhibitors)

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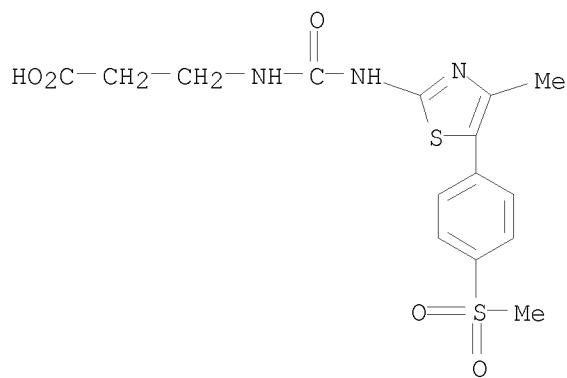
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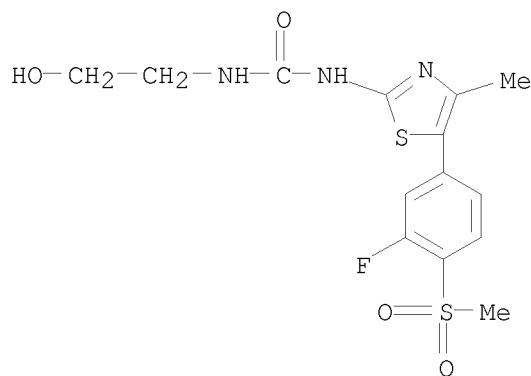
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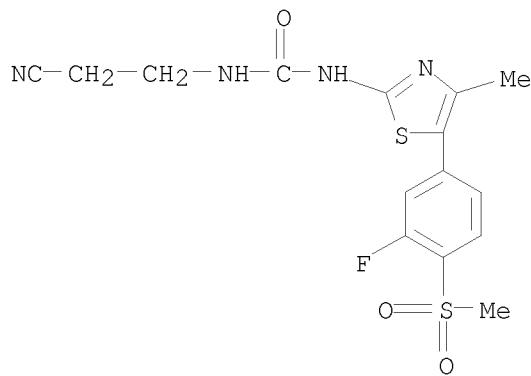
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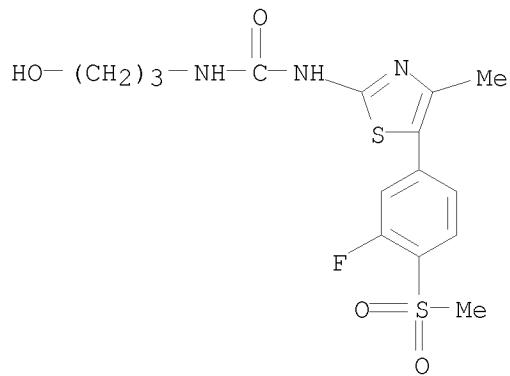
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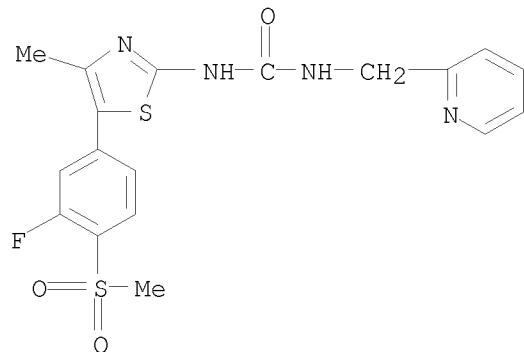
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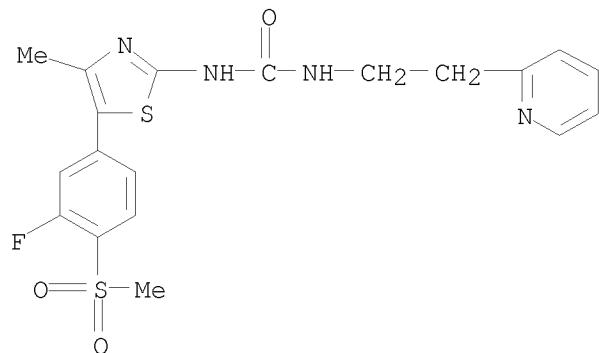
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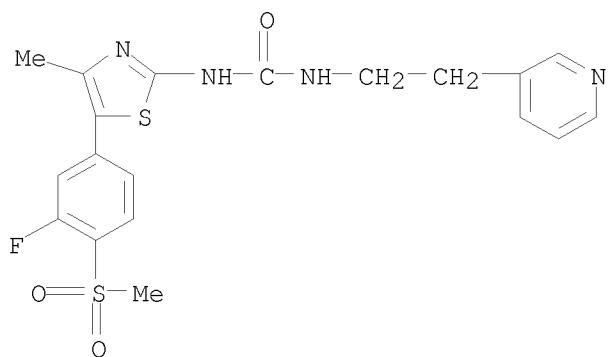
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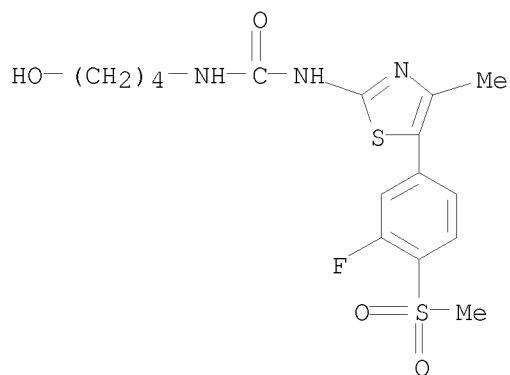
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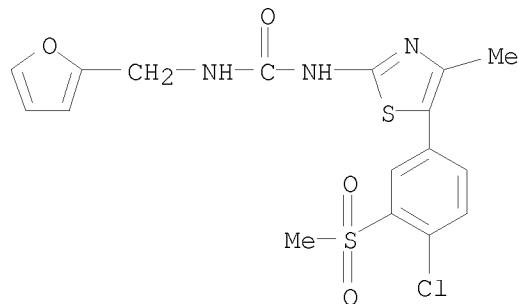
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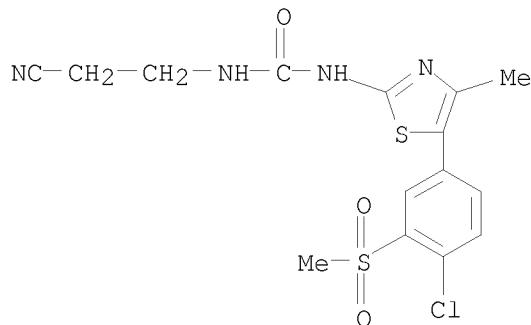
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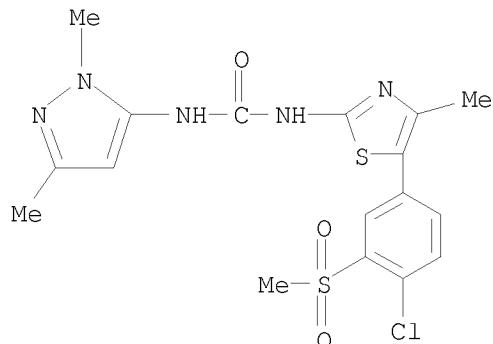
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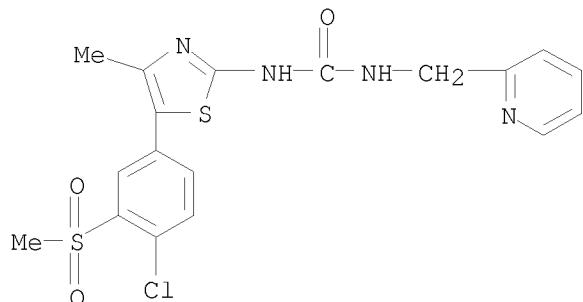
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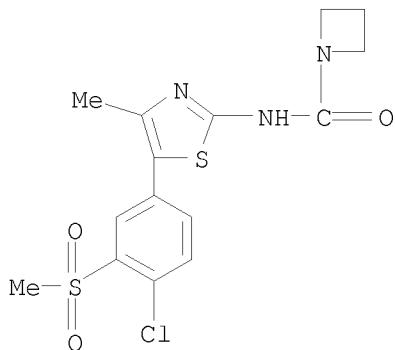
RN 593959-60-5 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2-pyridinylmethyl)- (CA INDEX NAME)



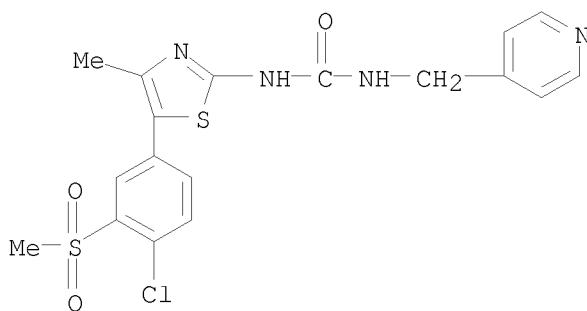
RN 593959-64-9 ZCPLUS

CN 1-Azetidinecarboxamide, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]- (CA INDEX NAME)



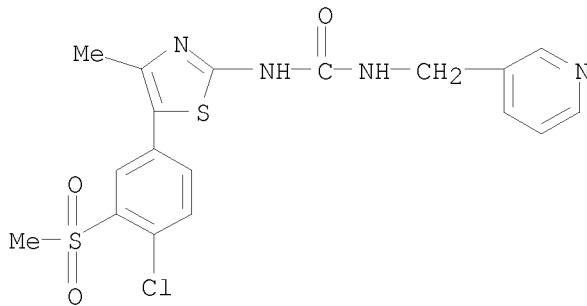
RN 593959-65-0 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(4-pyridinylmethyl)- (CA INDEX NAME)



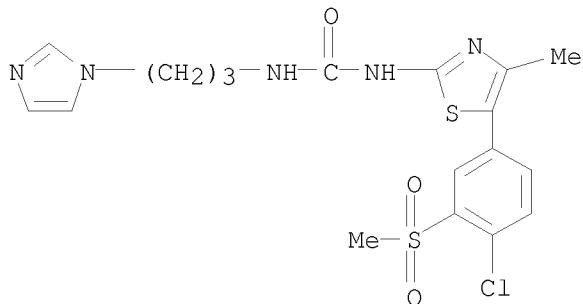
RN 593959-66-1 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(3-pyridinylmethyl)- (CA INDEX NAME)



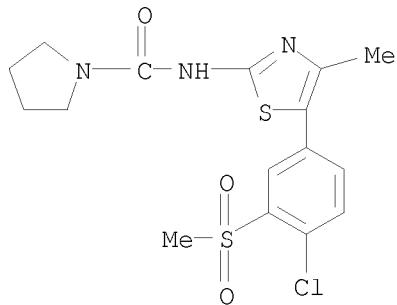
RN 593959-67-2 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(3-(1H-imidazol-1-yl)propyl)- (CA INDEX NAME)



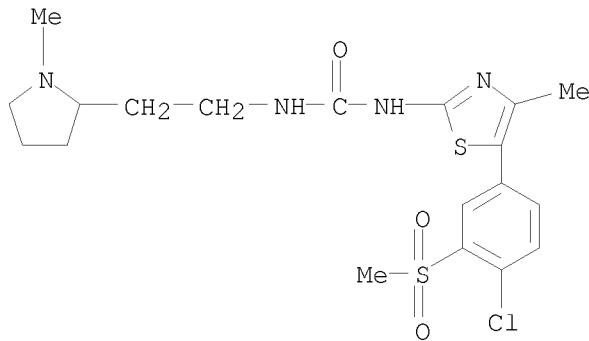
RN 593959-68-3 ZCPLUS

CN 1-Pyrrolidinecarboxamide, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]- (CA INDEX NAME)



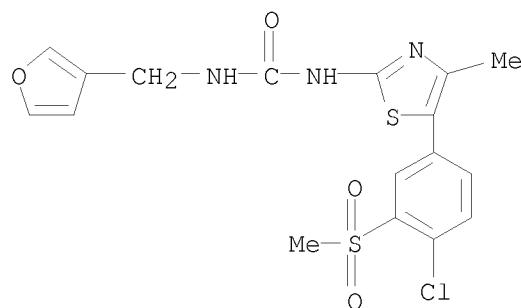
RN 593959-70-7 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2-(1-methyl-2-pyrrolidinyl)ethyl)- (CA INDEX NAME)



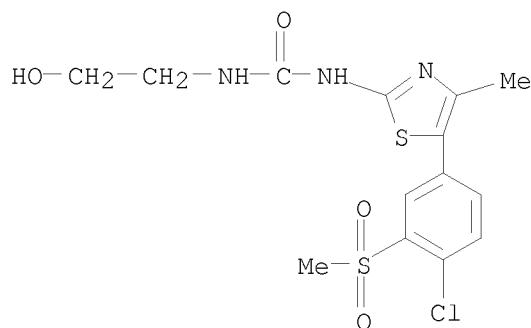
RN 593959-71-8 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(3-furanylmethyl)- (CA INDEX NAME)



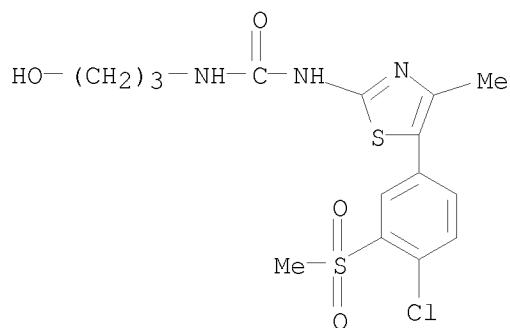
RN 593959-72-9 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2-hydroxyethyl)- (CA INDEX NAME)



RN 593959-73-0 ZCPLUS

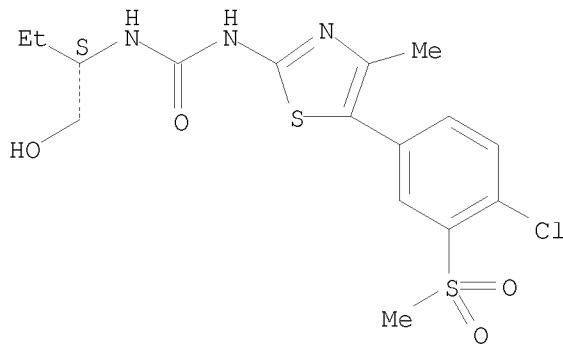
CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(3-hydroxypropyl)- (CA INDEX NAME)



RN 593959-74-1 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(1S)-1-(hydroxymethyl)propyl]- (CA INDEX NAME)

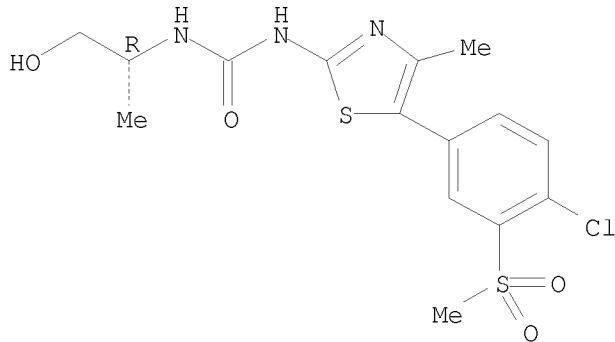
Absolute stereochemistry.



RN 593959-76-3 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(1R)-2-hydroxy-1-methylethyl]- (CA INDEX NAME)

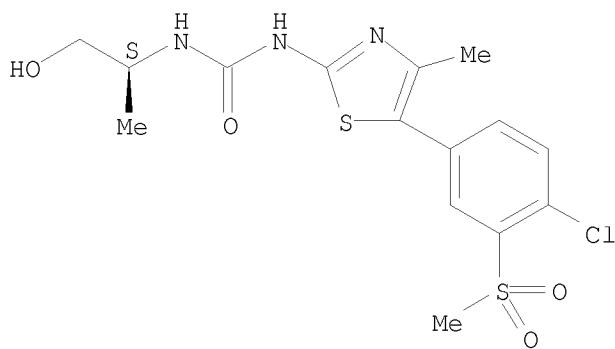
Absolute stereochemistry.



RN 593959-77-4 ZCPLUS

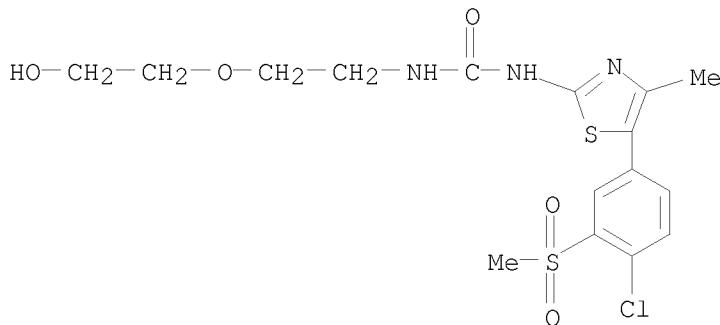
CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(1S)-2-hydroxy-1-methylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



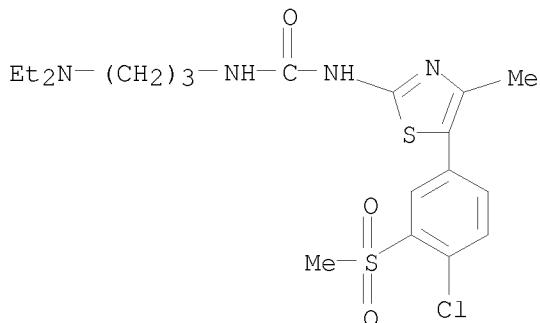
RN 593959-78-5 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2-hydroxyethoxyethyl)- (CA INDEX NAME)



RN 593959-79-6 ZCPLUS

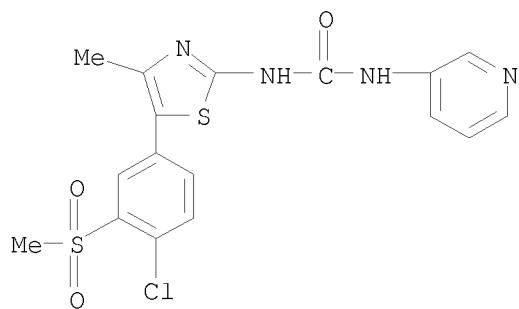
CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(3-diethylamino)propyl- (CA INDEX NAME)



RN 593959-80-9 ZCPLUS

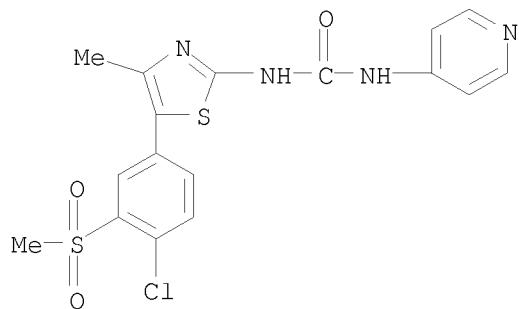
CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-3-

pyridinyl- (CA INDEX NAME)



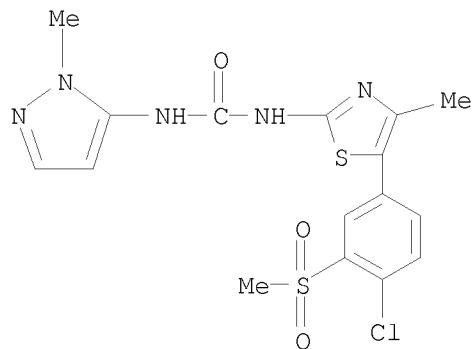
RN 593959-81-0 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-4-pyridinyl- (CA INDEX NAME)



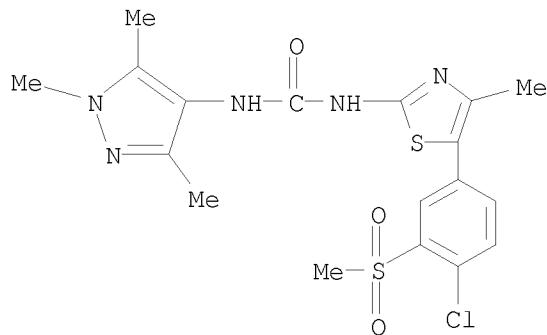
RN 593959-82-1 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-[(1-methyl-1H-pyrazol-5-yl)- (CA INDEX NAME)



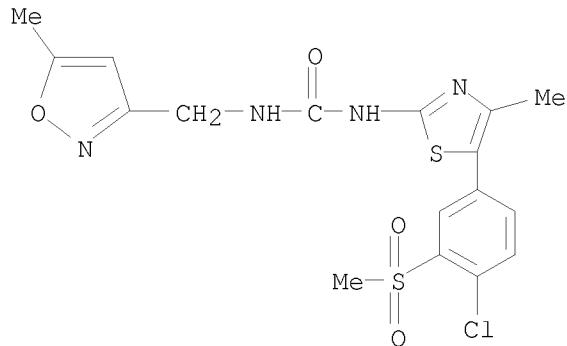
RN 593959-83-2 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(1,3,5-trimethyl-1H-pyrazol-4-yl)- (CA INDEX NAME)



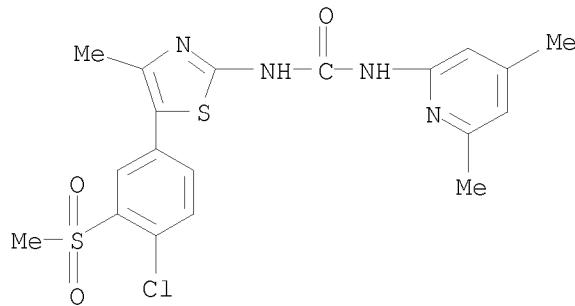
RN 593959-84-3 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(5-methyl-3-isoxazolyl)methyl- (CA INDEX NAME)



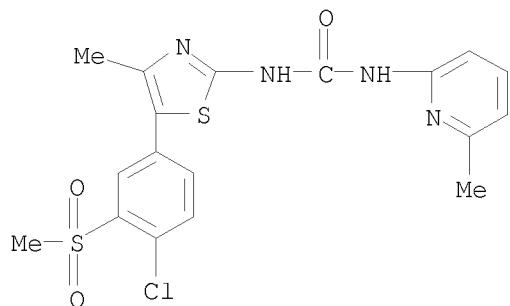
RN 593959-85-4 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(4,6-dimethyl-2-pyridinyl)- (CA INDEX NAME)



RN 593959-86-5 ZCPLUS

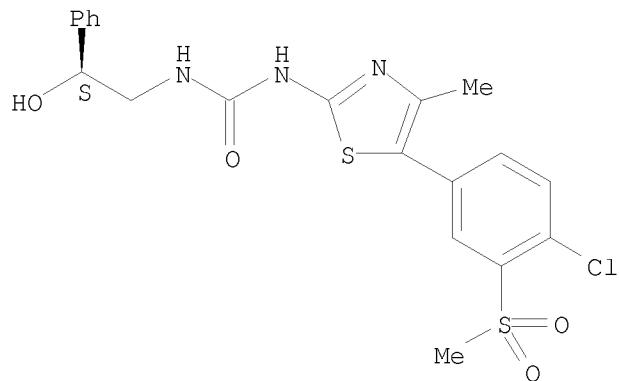
CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(6-methyl-2-pyridinyl)- (CA INDEX NAME)



RN 593959-87-6 ZCPLUS

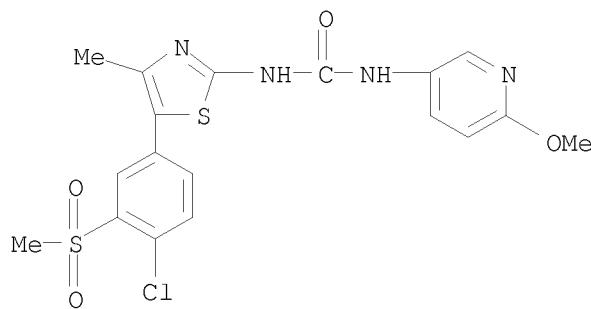
CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2S)-2-hydroxy-2-phenylethyl- (CA INDEX NAME)

Absolute stereochemistry.



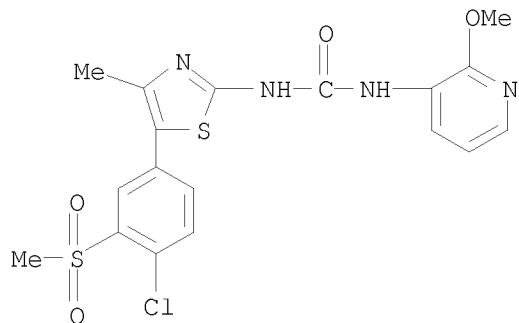
RN 593959-90-1 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(6-methoxy-3-pyridinyl)- (CA INDEX NAME)



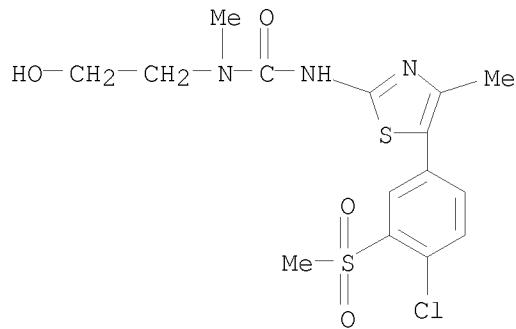
RN 593959-91-2 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2-methoxy-3-pyridinyl)- (CA INDEX NAME)



RN 593959-95-6 ZCPLUS

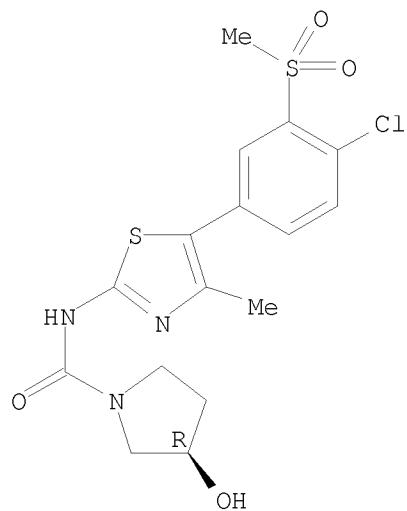
CN Urea, N'-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N-(2-hydroxyethyl)-N-methyl- (CA INDEX NAME)



RN 593959-96-7 ZCPLUS

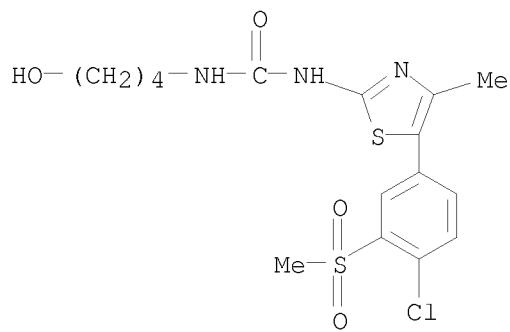
CN 1-Pyrrolidinecarboxamide, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-3-hydroxy-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.



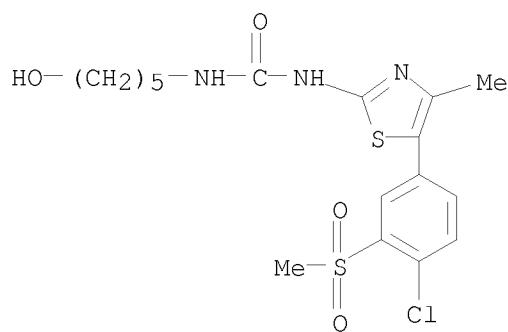
RN 593959-97-8 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(4-hydroxybutyl)- (CA INDEX NAME)



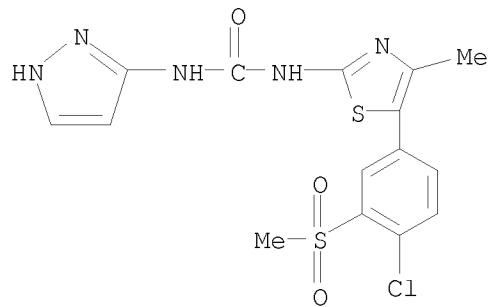
RN 593959-98-9 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(5-hydroxypentyl)- (CA INDEX NAME)



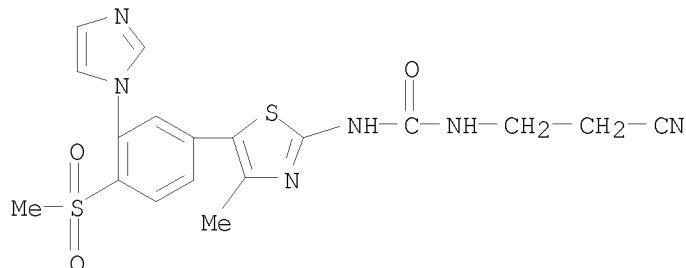
RN 593959-99-0 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-1H-pyrazol-3-yl- (CA INDEX NAME)



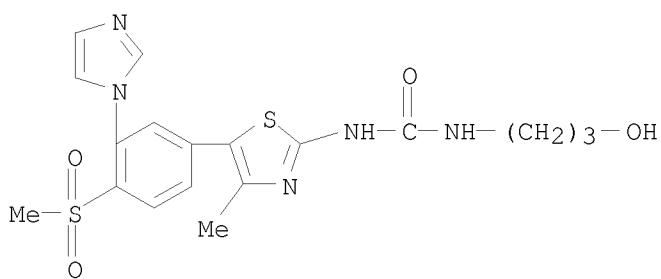
RN 593960-05-5 ZCPLUS

CN Urea, N-(2-cyanoethyl)-N'-(5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl)- (CA INDEX NAME)



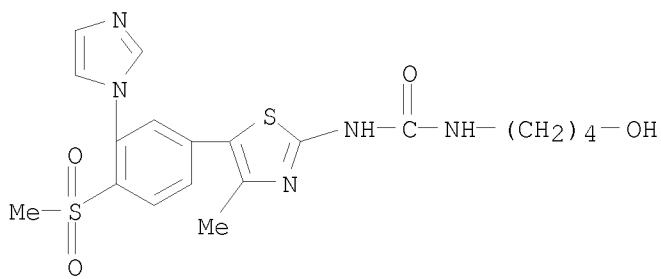
RN 593960-06-6 ZCPLUS

CN Urea, N-(3-hydroxypropyl)-N'-(5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl)- (CA INDEX NAME)



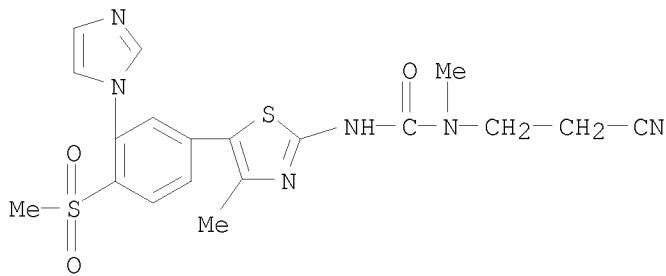
RN 593960-07-7 ZCPLUS

CN Urea, N-(4-hydroxybutyl)-N'-[5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]- (CA INDEX NAME)



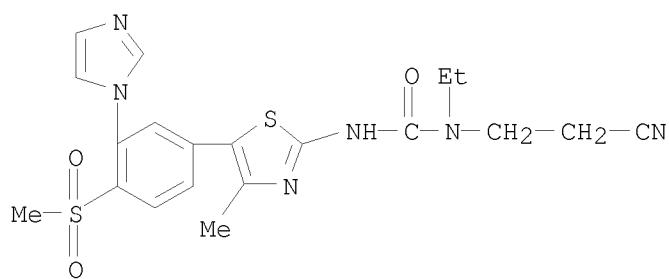
RN 593960-09-9 ZCPLUS

CN Urea, N-(2-cyanoethyl)-N'-[5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N-methyl- (CA INDEX NAME)



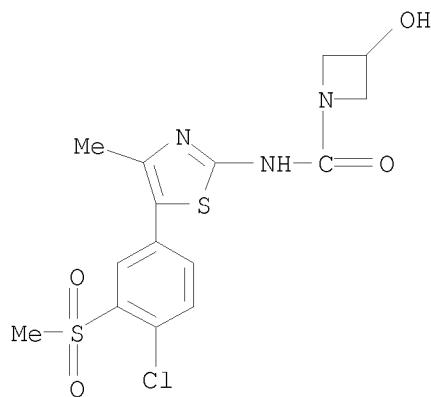
RN 593960-10-2 ZCPLUS

CN Urea, N-(2-cyanoethyl)-N-ethyl-N'-[5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]- (CA INDEX NAME)



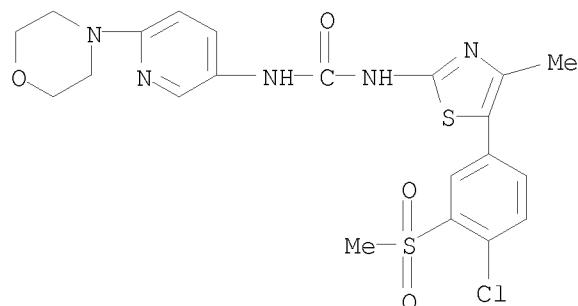
RN 593960-17-9 ZCPLUS

CN 1-Azetidinecarboxamide, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-3-hydroxy- (CA INDEX NAME)



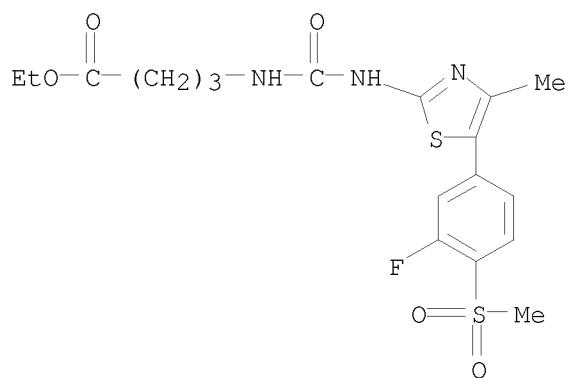
RN 593960-18-0 ZCPLUS

CN Urea, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(6-(4-morpholinyl)-3-pyridinyl)- (CA INDEX NAME)



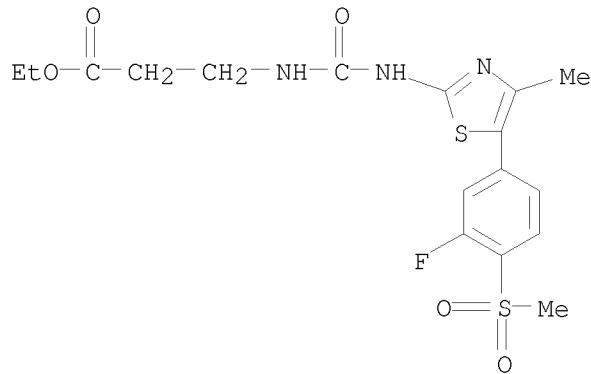
RN 593960-19-1 ZCPLUS

CN Butanoic acid, 4-[[[[5-[3-fluoro-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]amino]carbonyl]amino]-, ethyl ester (CA INDEX NAME)



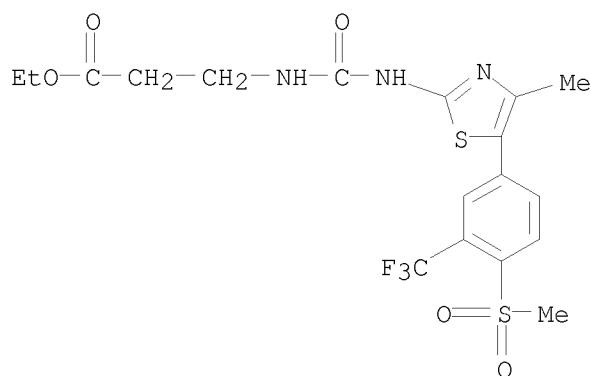
RN 593960-20-4 ZCPLUS

CN β -Alanine, N-[(5-[3-fluoro-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl)amino]carbonyl]-, ethyl ester (CA INDEX NAME)



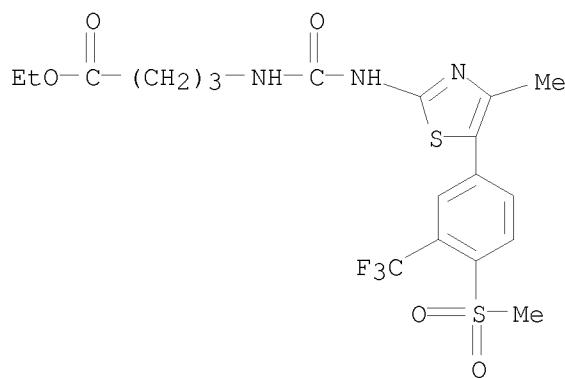
RN 593960-21-5 ZCPLUS

CN β -Alanine, N-[(4-methyl-5-[4-(methylsulfonyl)-3-(trifluoromethyl)phenyl]-3-thiazolyl)amino]carbonyl]-, ethyl ester (CA INDEX NAME)



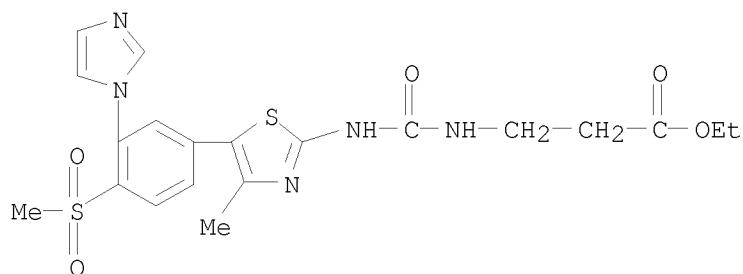
RN 593960-22-6 ZCPLUS

CN Butanoic acid, 4-[[[[4-methyl-5-[4-(methylsulfonyl)-3-(trifluoromethyl)phenyl]-2-thiazolyl]amino]carbonyl]amino]-, ethyl ester (CA INDEX NAME)



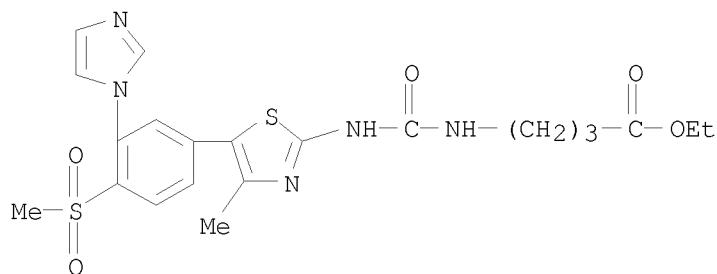
RN 593960-23-7 ZCPLUS

CN beta-Alanine, N-[[5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]amino]carbonyl]-, ethyl ester (CA INDEX NAME)



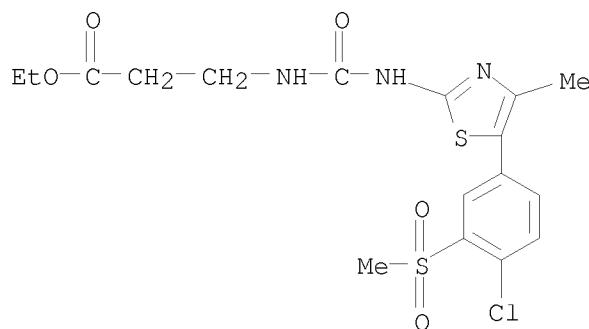
RN 593960-24-8 ZCPLUS

CN Butanoic acid, 4-[[[5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]amino]carbonyl]amino]-, ethyl ester (CA INDEX NAME)



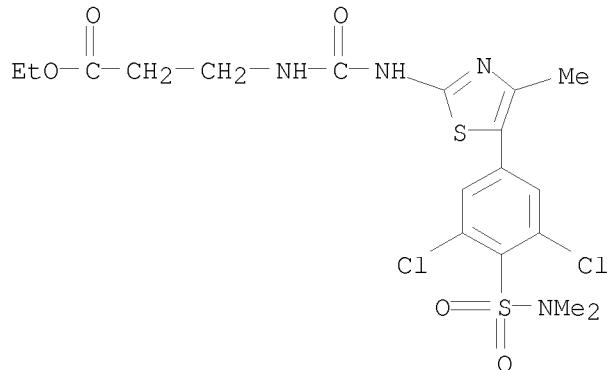
RN 593960-25-9 ZCPLUS

CN β -Alanine, N-[[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]amino]carbonyl-, ethyl ester (CA INDEX NAME)

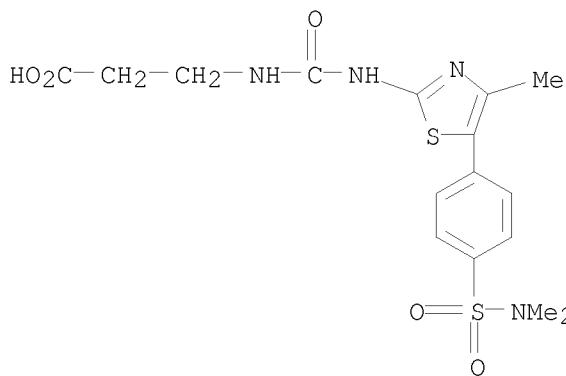


RN 593960-26-0 ZCPLUS

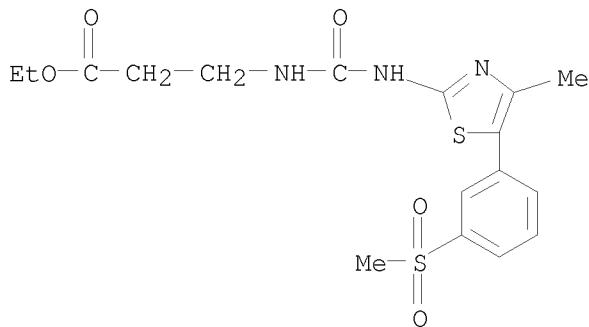
CN β -Alanine, N-[[5-[3,5-dichloro-4-[(dimethylamino)sulfonyl]phenyl]-4-methyl-2-thiazolyl]amino]carbonyl-, ethyl ester (CA INDEX NAME)



RN 593960-28-2 ZCPLUS

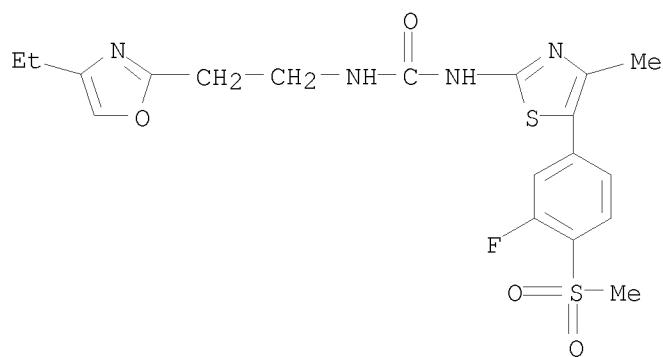
CN β -Alanine, N-[[[5-[4-[(dimethylamino)sulfonyl]phenyl]-4-methyl-2-thiazolyl]amino]carbonyl]- (CA INDEX NAME)

RN 593960-31-7 ZCPLUS

CN β -Alanine, N-[[4-methyl-5-[3-(methylsulfonyl)phenyl]-2-thiazolyl]amino]carbonyl]-, ethyl ester (CA INDEX NAME)

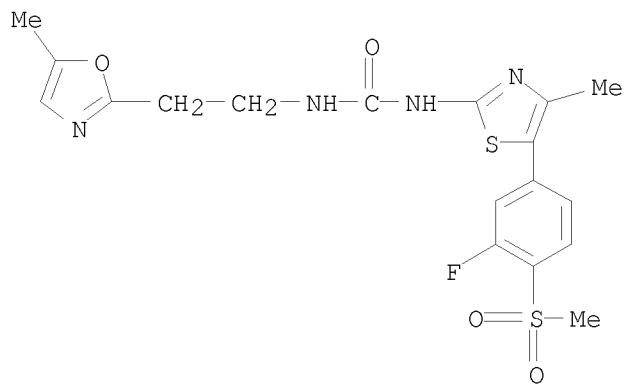
RN 593960-34-0 ZCPLUS

CN Urea, N-[2-(4-ethyl-2-oxazolyl)ethyl]-N'-(5-[3-fluoro-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl)- (CA INDEX NAME)



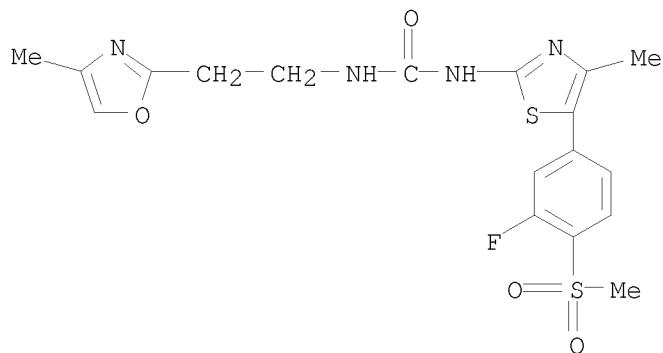
RN 593960-35-1 ZCPLUS

CN Urea, N-[5-[3-fluoro-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2-(5-methyl-2-oxazolyl)ethyl)- (CA INDEX NAME)



RN 593960-36-2 ZCPLUS

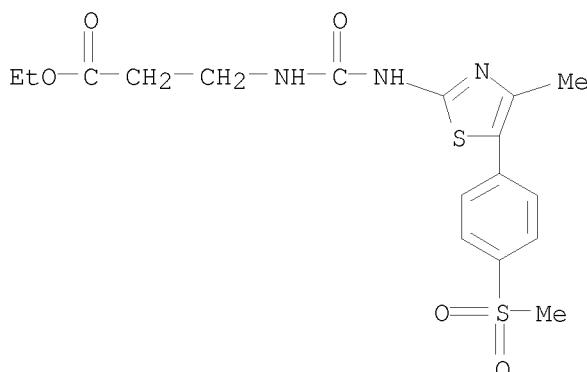
CN Urea, N-[5-[3-fluoro-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-N'-(2-(4-methyl-2-oxazolyl)ethyl)- (CA INDEX NAME)



IT **593960-55-5P**, 3-[3-[5-[4-(Methanesulfonyl)phenyl]-4-methylthiazol-2-yl]ureido]propionic acid ethyl ester **593960-64-6P**,
 Imidazole-1-carboxylic acid [5-[3-(imidazol-1-yl)-4-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]amide **593960-67-9P**
 , 3-[[(tert-Butyldiphenylsilyl)oxy]azetidine-1-carboxylic acid
 [5-[4-chloro-3-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]amide
593960-79-3P, Imidazole-1-carboxylic acid
 [5-[3-fluoro-4-(methanesulfonyl)phenyl]-4-methylthiazol-2-yl]amide
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of phenylthiazole derivs. as phosphatidylinositol
 3-kinase inhibitors)

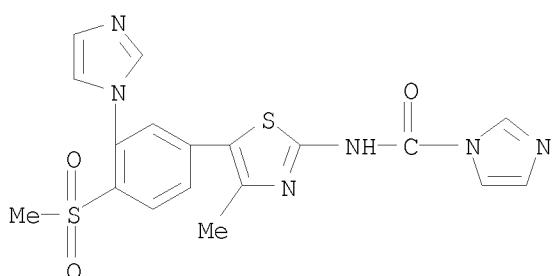
RN 593960-55-5 ZCPLUS

CN β -Alanine, N-[[[4-methyl-5-[4-(methylsulfonyl)phenyl]-2-thiazolyl]amino]carbonyl]-, ethyl ester (CA INDEX NAME)



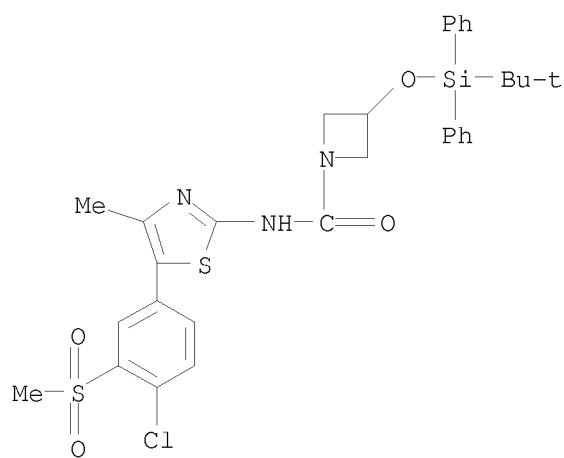
RN 593960-64-6 ZCPLUS

CN 1H-Imidazole-1-carboxamide, N-[5-[3-(1H-imidazol-1-yl)-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]- (CA INDEX NAME)



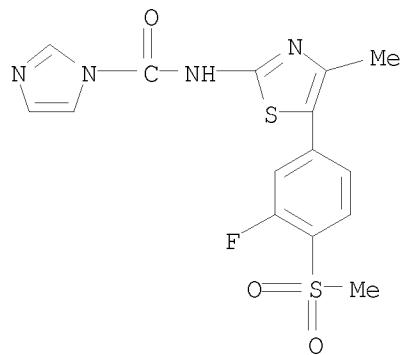
RN 593960-67-9 ZCPLUS

CN 1-Azetidinecarboxamide, N-[5-[4-chloro-3-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]- (CA INDEX NAME)



RN 593960-79-3 ZCPLUS

CN 1H-Imidazole-1-carboxamide, N-[5-[3-fluoro-4-(methylsulfonyl)phenyl]-4-methyl-2-thiazolyl]- (CA INDEX NAME)



REFERENCE COUNT:

14

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT